



Technical data

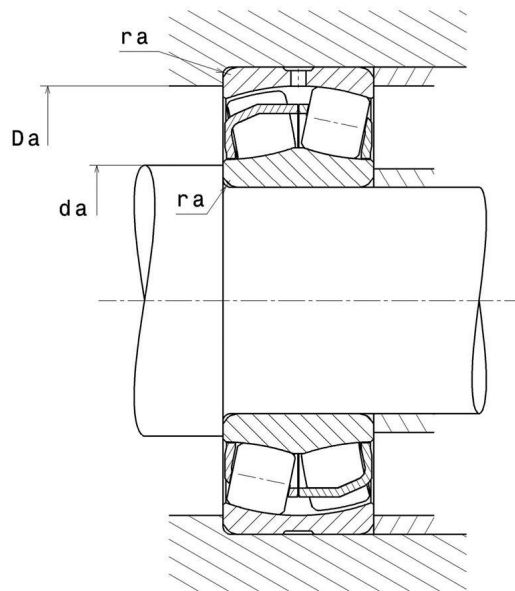
22224EAW33

Spherical roller bearings

Spherical roller bearing, pressed steel cage, groove and lubrication holes on outer ring

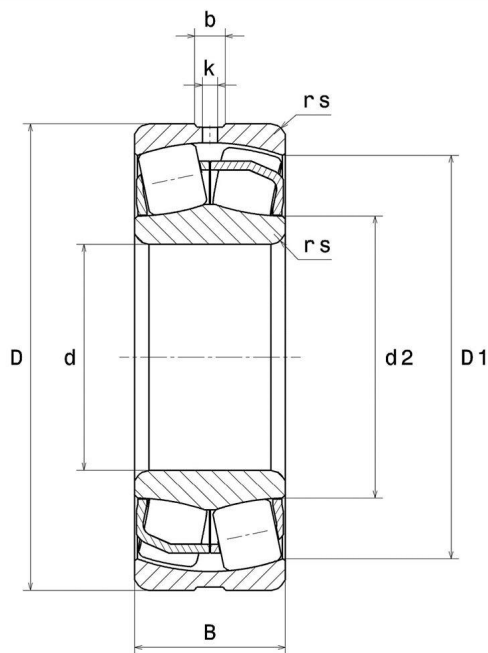
ULTAGE

VISUAL (S)



22224EAW33

Spherical roller bearings



PRODUCT DIMENSIONS

| | |
|--|----------|
| Internal diameter d | 120 mm |
| External diameter D | 215 mm |
| Bearing/Inner ring width(B) | 58 mm |
| External diameter inner ring d2 | 141,9 mm |
| Inner diameter outer ring D1 | 192,3 mm |
| Min fillet radius rs | 2,1 mm |
| Number of lubrication holes | 3 or 4 |
| Groove width (b) | 12,16 mm |
| Hole diameter (k) | 6 mm |
| Coef e | 0.25 |
| Lower axial load coef (Y1) | 2.74 |
| Upper axial load coef (Y2) | 4.08 |
| Static axial load coef (Y0) | 2.68 |
| Radial clearance class | CN |
| Mass | 8,693 kg |
| Brand | SNR |

PRODUCT PERFORMANCE

| | |
|------------------------|--------|
| Dynamic load, C | 688 kN |
|------------------------|--------|

PRODUCT PERFORMANCE

| | |
|---|-------------|
| Static load, C₀ | 753 kN |
| Fatigue limit load, C_u | 78,2 kN |
| Reference thermal speed (N_{ref}) | 3000 tr/min |
| Mechanical Limit Speed N_{lim} | 3800 tr/min |
| Min operating temperature, T_{min} | -40 °C |
| Max operating temperature, T_{max} | 200 °C |
| Characteristic cage frequency, FTF | 0.423 Hz |
| Characteristic rolling element frequency, BSF | 6.274 Hz |
| Characteristic outer ring frequency, BPF₀ | 7.618 Hz |
| Characteristic inner ring frequency, BPF_I | 10.382 Hz |

ABUTMENT

| | |
|---|--------|
| Max shoulder diameter IR da max | 0 mm |
| Min shoulder diameter IR da min | 132 mm |
| Max shoulder diameter OR Da max | 203 mm |
| Max shaft & housing fillet radius ra max | 2 mm |

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

| Fa / Fr ≤ e | | Fa / Fr > e | |
|-------------|----|-------------|----|
| X | Y | X | Y |
| 1 | Y1 | 0.67 | Y2 |

Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

| X ₀ | Y ₀ |
|----------------|----------------|
| 1 | Y0 |

The values for e, Y1, Y2 and Y0 are shown in the above table .